distributed over the perimeter of the wall of the nozzle body, each injection orifice constituting a discrete separation triggering element inducing a distinct zone of jet separation.

3. (Twice Amended) A rocket engine nozzle as claimed in claim 2, wherein the injection orifices are uniformly distributed over the perimeter of the wall of the nozzle body.

4. (Twice Amended) A rocket engine nozzle as claimed in claim 8, wherein the nozzle body is conical and the injection orifices comprise at least two which are symmetrically positioned around the circumference of said nozzle.

5. (Twice Amended) A rocket engine nozzle as claimed in claim 3, wherein the injection orifices comprise 3 in number and are arranged at substantially 120° to one another over the perimeter of the nozzle body.

6. (Twice Amended) A rocket engine nozzle as claimed in claim 2, wherein said injection cross section is arranged at distance D from the throat which is substantially less than a distance D_0 of a location of spontaneous separation of the flow at sea level.

7. (Twice Amended) A rocket engine nozzle as claimed in claim 6, wherein the injection device comprises a plurality of injectors situated at different distances from the throat, and a disturbing device for selectively feeding said injectors at different cross sectional locations

to take into account the variation of said distance of spontaneous of the flow as a function of altitude.

Please add the following new claim:

8. (New) A rocket engine nozzle comprising a combustion chamber, a throat and a divergent nozzle body downstream of said throat, said nozzle body having an axis and a system for controlling jet separation of the flow in the nozzle body, said flow being parallel to the axis of the nozzle body, wherein said control system comprises at least two mutually spaced separation triggering elements positioned on at least one injection cross section that is perpendicular to the nozzle axis and an injection devise for simultaneously injecting fluid through the at least two separation triggering elements of one injection cross section, said spacing of the separation triggering elements being such that said injection through the at least two separation triggering elements generates from mutually spaced initiation points positioned in the divergent nozzle body, distinct zones of jet separation, to form a three-dimensional separation of the flow.